

REMARKS

Applicant thanks the Examiner for acknowledging Applicant's claim to foreign priority under 35 U.S.C. § 119(a)-(d), and that the certified copy of the priority document has been received.

Drawings:

Applicant also thanks the Examiner for indicating that Applicant's drawings filed March 11, 2004 have been accepted.

Specification:

Applicant thanks the Examiner for indicating that the objection to the specification has been withdrawn.

Claim Rejections:

Claims 1-14 are all of the claims pending in the present application, and currently all of the claims stand rejected.

35 U.S.C. § 103(a) Rejection – Claims 1-14:

Claims 1-14 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,659,402 to Fujita et al., in view of U.S. Patent No. 5,185,812 to Yamashita et al. In view of the following discussion, Applicant respectfully traverses the above rejection.

In rejecting the present claims, the Examiner asserts that it would be obvious to combine the Fujita and Yamashita references, and that the resultant combination would teach or suggest each and every feature of the claimed invention. Applicant respectfully disagrees with the Examiner for the following reasons.

First, in the claimed invention, a picture element characteristic determining unit is used to figure out the distribution of differences of tone levels between object picture elements which are the picture elements of the image data acquired by the image acquisition unit and neighboring picture elements. *See* claim 1. Thus, in the claimed invention, the distribution of differences of tone levels between the value of a picture element to be inspected and the value of the neighboring picture element is obtained. Stated differently, the object to be inspected is one piece of two-dimensional picture image data.

However, this is not disclosed or suggested in Yamashita, as asserted by the Examiner. Specifically, at least one of the differences between Yamashita and the claimed invention is the difference between two picture image data, i.e., the picture image which was shot and the reference picture image which is obtained in Yamashita, is different from the claimed invention. Further, in Yamashita the difference between the appropriate picture image and the actual picture image which was shot is emphasized. Because of this distinction, Yamashita has little relevance to the claimed invention.

Therefore, Applicant submits that even if the disclosures of both Yamashita and Fujita are combined, features of claims 1, 13 and 14 would not have been taught nor suggested.

Second, claims 1, 13 and 14 compare the recited distribution obtained through the predetermined process with a prescribed model distribution. Namely, the inspection is performed between the two distributions.

In Fujita's invention, however, the numeric value obtained is simply compared with a threshold value. This does not disclose or suggest the above aspects of claims 1, 13 and 14.

Further, in Yamashita's invention, from among the two-dimensional data of the obtained difference value, the absolute value, the minimum value and the maximum value are just chosen for use. This means that the distributions of numeric values in the two-dimensional data are not considered as the inspection object. Again, this fails to disclose or teach this aspect of the claimed invention.

Therefore, even if the disclosures of Yamashita and Fujita are combined, the combination will not teach or suggest the aspect of the claimed invention which targets a distribution as an inspection object.

Third, Applicant also submits that the claimed invention is different from the disclosure in Yamashita because the former figures out the distribution of differences of tone levels between object picture elements and neighboring picture elements, while the latter performs the spatial differential on the distribution of the density difference.

Further, the claimed invention, before executing prescribed image processing, determines the characteristic of picture elements by comparing the figured-out distribution with a prescribed model distribution. However, on the other hand, Yamashita's device detects a defect of the inspected pattern to the reference pattern according to the spatial differential.

Specifically, Yamashita discloses a technique that detects defects of mask patterns. However, Yamashita uses two-dimensional digital picture image data and the two-dimensional reference picture image data prepared in advance as a standard for comparison, to obtain differences of each corresponding picture elements (it is still two-dimensional in this condition). Then, Yamashita puts a spatial filter having multi-directional components on the difference data,

to detect defects of the mask patterns by making use of the absolute value, the minimum value and the maximum value of the differences.

Further, Yamashita's disclosure has pattern data (two-dimensional) for comparison based on the original design. The picture image data that was shot are compared with this pattern data. However, the claimed invention only specifies a certain object picture element and then obtains the difference of tone levels between the object picture element and the neighboring picture elements. Contrary to the cited references, the claimed invention does not use pattern data for comparison.

It is further noted that, Yamashita's disclosure relates to a technique that compares an appropriate picture image with a mask pattern picture image that was shot, to make a decision on whether the differences are the one that can be neglected or the one that cannot be neglected as impermissible defects. To this end Yamashita teaches using a spatial filter having different directionality is effective in obtaining the differences to be accentuated since a mask pattern has directional character.

However, the claimed invention involves a technique that can make a decision on picture element characteristic on the basis of the distribution of differences between a certain basic picture element and the neighboring picture elements. For example, characteristic such as Moire effect can be figured out.

In view of the foregoing, Applicant submits that even if the above references were combined, as suggested by the Examiner, the resultant combination would fail to teach or suggest each and every feature of the claimed invention. Therefore, the Examiner has failed to

RESPONSE UNDER 37 C.F.R. §1.111
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establish a *prima facie* case of obviousness, as required under 35 U.S.C. § 103(a), with regard to the above claims. Accordingly, Applicant hereby requests the Examiner reconsider and withdraw the above 35 U.S.C. § 103(a) rejection of claims 1-14.

Conclusion:

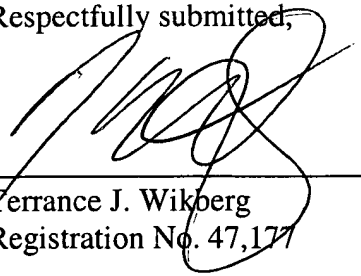
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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